

State of Vermont, HIE Steering Committee HIE Technical Roadmap Project

National HIE Trends & Initiatives

Lantana Consulting Group

Velatura

July 24, 2019 HIE SC Meeting, Waterbury

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Agenda

1. Trust Exchange Framework and Common Agreement (TEFCA)
2. Proposed Rule from ONC
3. Proposed Rule from CMS
4. DaVinci Project
5. Sequoia/Carequality
6. CommonWell
7. Surescripts
8. OpenNotes
9. Post-Acute Care Interoperability Landscape
10. National Public Health initiatives (CDC)
11. Telehealth

Disclosure: Lantana supports the DaVinci Project, Sequoia, CDC's NHSN and CMS quality programs.

Let's hear from you:

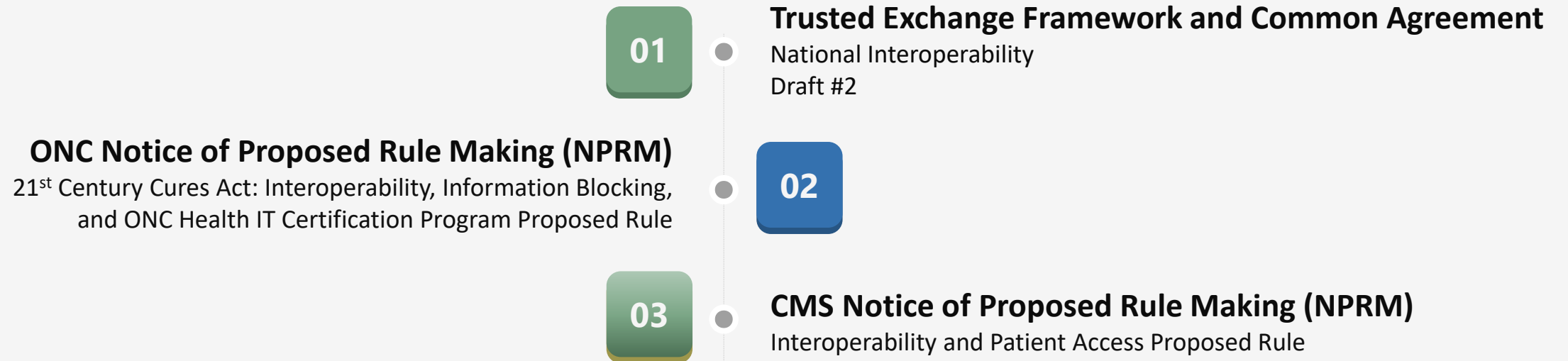
- How aware are you of this trend/initiative?
 - Not at all
 - Somewhat (monitoring, no policy or plan to address/adopt)
 - Very (monitoring closely; initiative/trend reflected in policy and plans)
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1. TEFCA

Shreya Patel



Federal Interoperability Initiatives





What is TEFCA?

- ✓ **TEFCA** stands for **T**rusted **E**xchange **F**ramework and **C**ommon **A**greement
 - ✓ Trusted Exchange Framework is a set of common principles that are designed to facilitate trust among HINs
 - ✓ Common Agreement provides the governance necessary to scale a functioning system of connected HINs that will grow over time to meet the demands of patients, clinicians, and payers.


SOURCE: A User's Guide to Understanding the Trusted Exchange Framework Draft Two. The Office of the National Coordinator for Health Information Technology, 2019


Who Participates in TEFCA?



 Health Information
Networks (HINs)

 Payers

 Public Health
Organizations

 Government
Agencies

 Technology
Developers

 Providers

 Individuals

SOURCE: A User's Guide to Understanding the Trusted Exchange Framework Draft
Two. The Office of the National Coordinator for Health Information Technology, 2019

Key Players



Recognized Coordinating Entity (RCE)

Oversight and governance as operational arm of Framework



Participants

Persons or entities connected to QHINs



Qualified Health Information Networks (QHINs)

On the ground facilitation



Participant Members

Connected to participants, could be an individual user

SOURCE: A User's Guide to Understanding the Trusted Exchange Framework Draft Two. The Office of the National Coordinator for Health Information Technology, 2019

Overview of Framework



IMAGES FROM: A User's Guide to Understanding the Trusted Exchange Framework Draft Two. The Office of the National Coordinator for Health Information Technology, 2019

Trusted Legal Framework



ONC & RCE

The ONC collaborates with the RCE to establish the Common Agreement



RCE & QHINs

RCE and QHINs sign the Common Agreement



QHINs & Participants

QHINs and Participants sign the QHIN-Participant Agreement*

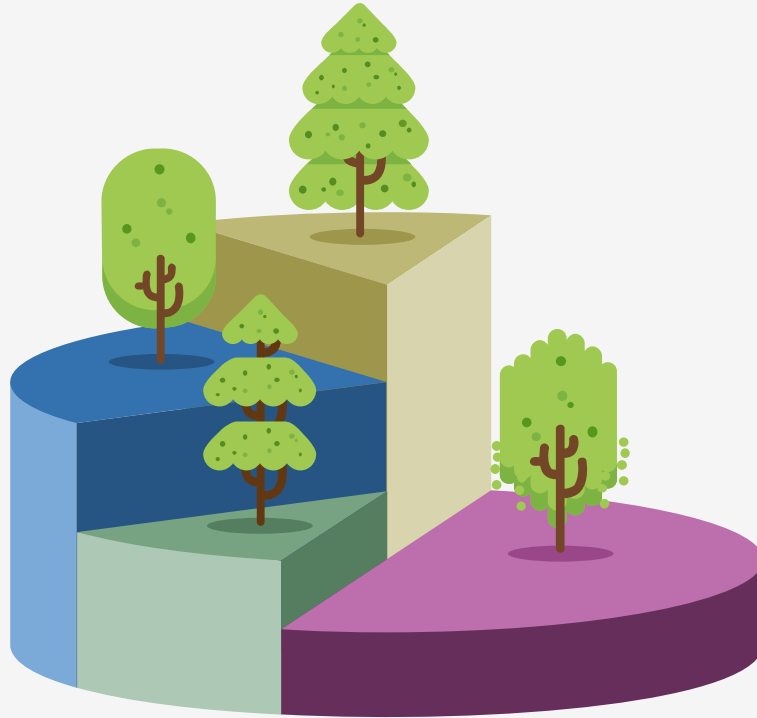


Participants & Participant Members

Participants and Participant Members will sign the Participant-Member Agreement*

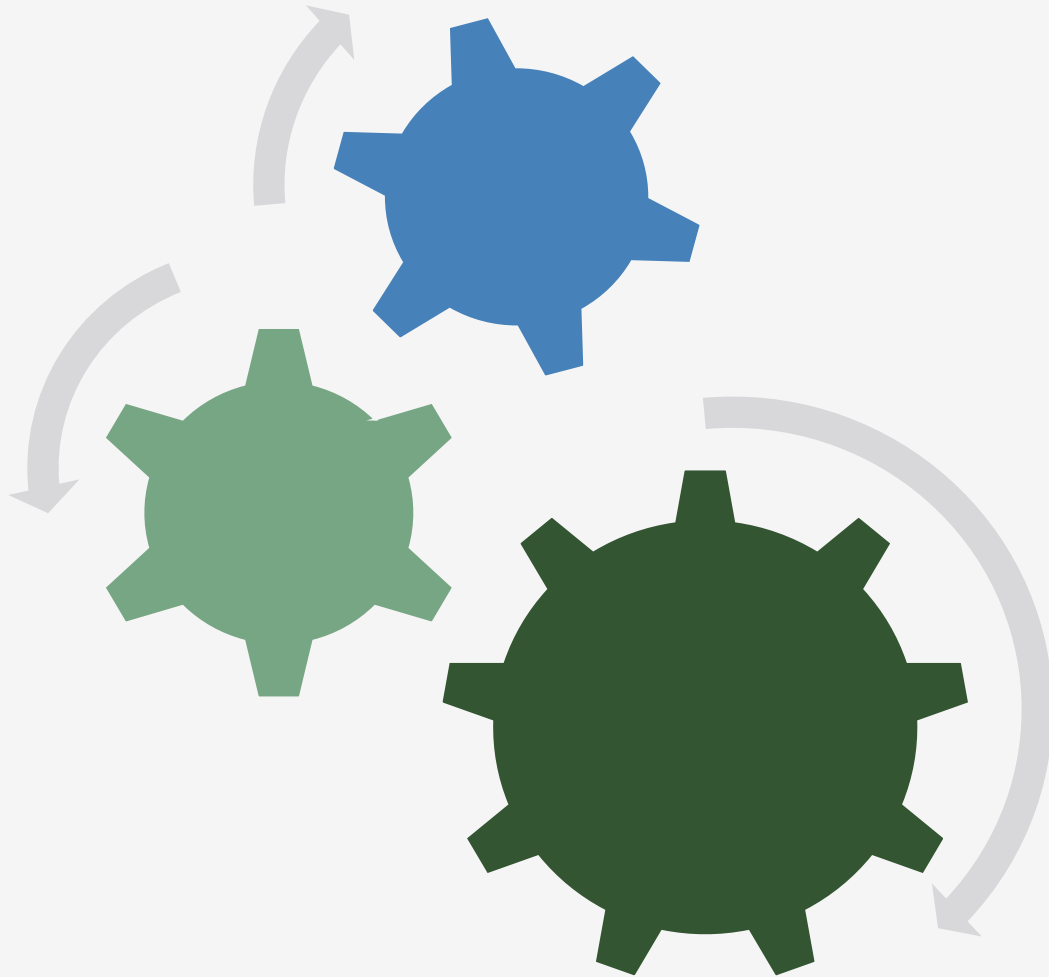
SOURCE: A User's Guide to Understanding the Trusted Exchange Framework Draft Two. The Office of the National Coordinator for Health Information Technology, 2019

What's Still Missing?



- ✓ Guidance on how to address the conflict in differing state laws
 - ✓ How framework will account for patient consent
- ✓ Specific number of QHINS
- ✓ Industry best practices
- ✓ Specific use cases employed under purposes for exchange
- ✓ Tie into national interoperability efforts
 - ✓ Ex. proposed rules or Promoting Interoperability
- ✓ Penalties for non-compliance and information blocking practices
- ✓ Financial incentives

How Can States Prepare for TEFCA?



- ✓ Use the minimum required terms and conditions for QHINs to determine industry “best practices”
- ✓ Consider what hurdles are in place currently that inhibit information sharing (e.g. privacy regulations that are more strict than national standards)
- ✓ Participate in national dialogue on recent draft via working groups and ONC webinars/ listening sessions

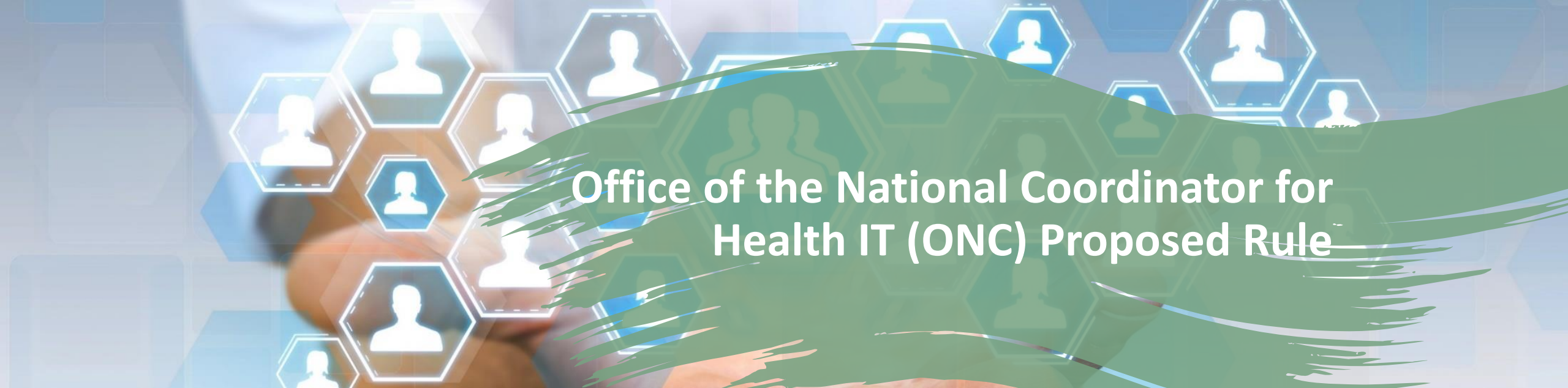
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2. Proposed Rule from ONC

Shreya Patel





Office of the National Coordinator for Health IT (ONC) Proposed Rule

?

Why has this captured the public eye?

- ✓ Seven exceptions to information blocking
- ✓ Patient Access

Information Blocking Exceptions

What are the seven instances which permit info blocking?

 Privacy of EHI

 Security of EHI

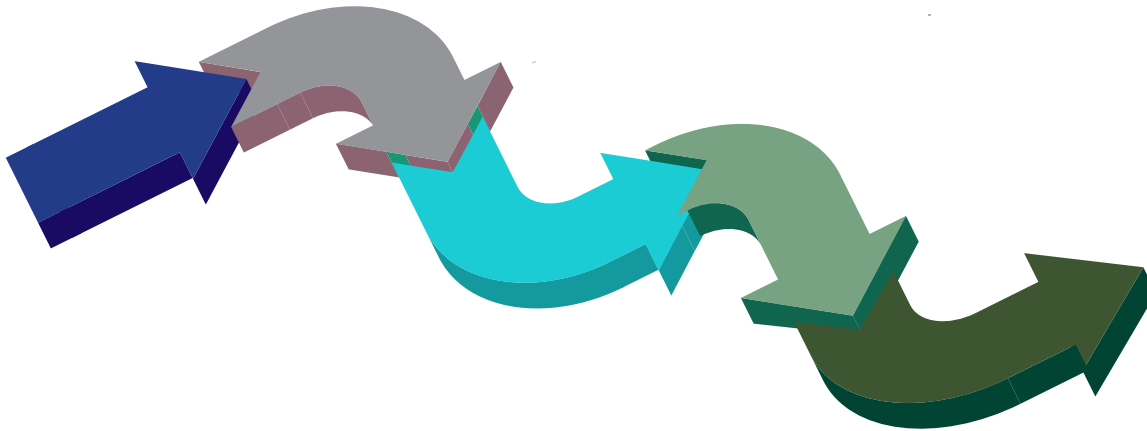
 Infeasible Requests

 Licensing

 Recovering Costs

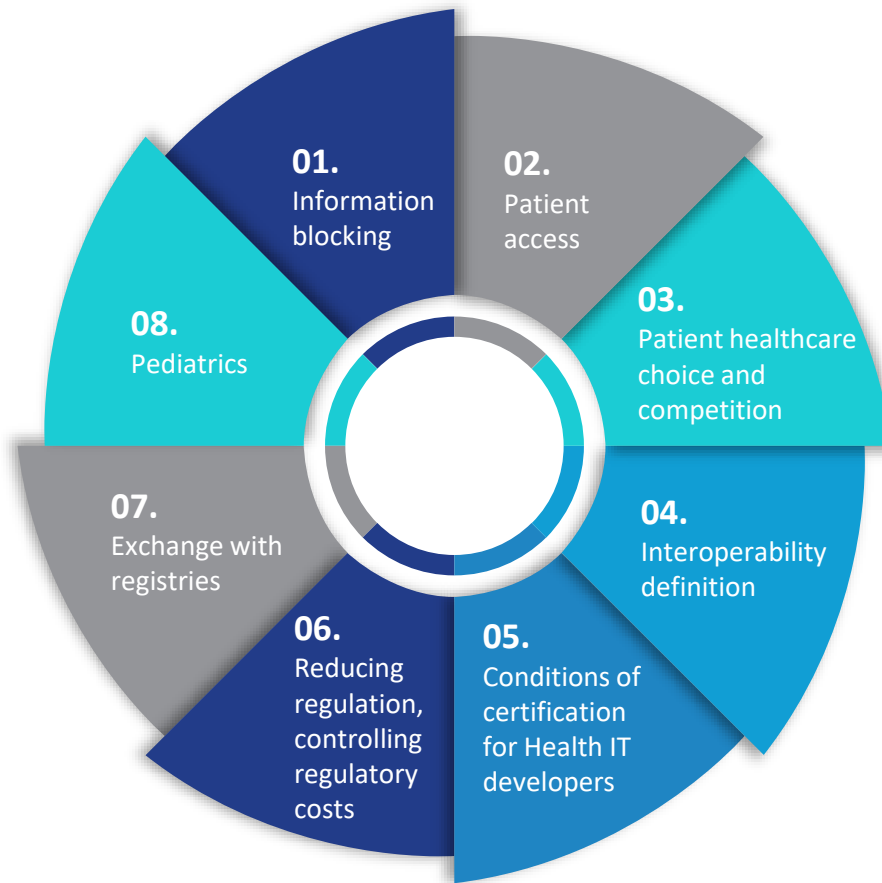
 Preventing Harm

 Maintenance and Improved Performance



Beyond Information Blocking

What else does the rule include?



The rule was written in response to provisions outlined in Congress's 2015 21st Century Cures Act. These issues all relate back to that.

The rule has been popularly classified as the "Information Blocking Rule," but there are many more issues under consideration.

3. Proposed Rule from CMS

Shreya Patel





Center for Medicare & Medicaid Services (CMS) Proposed Rule



**Patient Access: Giving patients access
to their own health information**

Patient Access Promotion

Why make patient access a priority?

New Mechanism, Old Requirements

This rule encourages entities to use Application Program Interfaces (APIs) to comply with **HIPAA Right of Access requirements**.

This would give patients access to their healthcare information with no special effort at no cost.



Types of Shared Information

What kind of information must be shared?

Individual's Information

- ✓ Current and past medical conditions and care received
- ✓ Encounters with capitated providers
- ✓ Provider remittances
- ✓ Enrollee cost-sharing
- ✓ Clinical data
- ✓ Laboratory notes



General Information

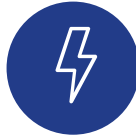
- ✓ Plan provider networks
- ✓ Plan's formulary
- ✓ Coverage policies
- ✓ Patient education tools

Effect on Payers

Payers are obligated to establish a “Coordination of Care Transaction”



Data



Payer information



Claim Information



Transitions of care information:

- ✓ Diagnoses
- ✓ Procedures
- ✓ Tests
- ✓ Providers seen

Tasks

- ✓ Retain information with ability to query it for up to **five years** after movement
- ✓ Participation in a trusted exchange framework (TEFCA)
- ✓ Avoid duplicative services, especially for dual-eligible patients

ADT Notification Requirement

Communication Among Entities

ADT Notifications are also required to be sent for all

- ✓ Medicare-participating hospitals
- ✓ Psychiatric hospitals
- ✓ Critical Access Hospitals (CAHs)



Let's hear from you on the ONC & CMS Rules:

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4. DaVinci

Rick Geimer

Goals:

- Address exchange use cases between payers and provider organizations.
- Minimize one-off solutions between payers and providers
- Create free reference implementations to promote industry-wide adoption.



- <http://www.hl7.org/about/davinci/>

Providers

Dallas Children's Health, MultiCare, OHSU, Providence St. Joseph Health, Rush University Medical Center, Sutter Health, Texas Health Resources, Weil Cornell Medicine

Payers

Anthem, BCBSA, BCBSAL, BCBSM, BCBST, BC Idaho, Cambia Health, Cigna, GuideWell, HCSC, Humana, Independence, United Healthcare

Vendors

Allscripts, Athenahealth/Virence(aka GE Centricity), Casenet, Cerner, Cognosante, Edifecs, Epic, HealthLX, InterSystems, Juxly, Optum, InterSystems, Surescripts, ZeOmega

The Argonaut Project

- Consortium of EHR vendors and providers
- Created in response to 2014 JASON Task Force recommendations, calling for FHIR-based APIs for data exchange
- Creates FHIR implementation guides (IGs) addressing functions such as data query, scheduling, clinical notes, bulk data, etc.
- Driver behind ONC's US Core Data for Interoperability (USCDI) initiative
- Does not address payer use cases: claims, coverage, prior-authorization, etc.





The Da Vinci Project

- Consortium of payers, providers, and EHR vendors
- Addresses gaps in Argonaut FHIR IGs focused on payer use cases
- Reuses Argonaut/USCDI work where possible vs. reinventing the wheel.

Da Vinci Use Cases

Data Exchange for Quality Measures	Coverage Requirements Discovery	Documentation Templates and Coverage Rules (comment ballot)
Health Record Exchange Framework / Library	Clinical Data Exchange	Prior-Authorization Support
Payer Data Exchange	Payer Data Exchange: Directory	Payer Data Exchange: Formulary
Alerts/Notifications: Transitions in Care, ER admit/discharge	Payer – Payer Coverage Determination	Documentation Templates and Coverage Rules (STU1 ballot)
Gaps in Care & Information	Health Record Exchange: Patient Data Exchange	Patient Cost Transparency
Risk Based Contract Member Identification	Performing Laboratory Reporting	Chronic Illness Documentation for Risk Adjustment

Use Case Status

-  In HL7 May ballot as STU or ballot for comment
-  Planned for HL7 July ballot as STU
-  Planned for HL7 September ballot as STU
-  Use cases in discovery (some may be balloted in January 2020)

Let's hear from you on DaVinci:

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5. Sequoia/Carequality

Sequoia, eHealth Exchange, Carequality Overview

The Sequoia Project

- An independent, trusted advocate for **nationwide** health information exchange.

eHealth Exchange

- Sequoia project initiative
- The largest public-private, health information network in the US

Carequality

- Sequoia project initiative
- A network-to-network trust framework
- Connects over 600K Care Providers, 35K Clinics, and 1250 Hospitals



<https://sequoiaproject.org/>

Carequality Members



eHealth Exchange/Carequality Additional Details

- Primary exchange mechanism for Epic users
- Epic Care Everywhere connects to eHealth Exchange
- Commonwell is now a Carequality implementer, so can exchange with Cerner and other Commonwell Alliance members.

Let's hear from you on Sequoia, eHealth Exchange, Carequality:

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6. Commonwell

Goals:

- Make health data available to individuals and caregivers regardless of where care occurs.
- Access to this data must be built into health IT at a reasonable cost for use by a broad range of healthcare providers and the people they serve.
- Create a **vendor-neutral** platform that breaks down the technological and process barriers that inhibit effective health data exchange.
- Leverage existing standards and policies for scalable, secure, and reliable interoperability



<https://www.commonwellalliance.org/who-is-connected/>



Commonwell Members



CommonWell members represent 72% of the acute care EHR market ⁱⁱ and 34% of the ambulatory care EHR market,

- **Primary exchange mechanism for Cerner users**
- **Cerner is a founding member of Commonwell**
- **Commonwell is now a Carequality implementer.**
- **The following Commonwell members provided Carequality connectivity:**
 - Brighttree
 - Cerner
 - Evident
 - Greenway Health
 - Meditech

7. Surescripts

Goals:

- Build a national network to connect clinicians, EHRs, hospitals, pharmacy benefit managers (PBMs), pharmacies and technology vendors.

Focus Areas:

- E-Prescribing
- **Client Direct Messaging**
- **Clinical History (Record Locator & Exchange)**
- **Benefit Optimization (Real Time Prescription Benefit)**
- **Medication History**
- **Prior Authorization**

Network:

- Connectivity to virtually all EHRs, PBMs, pharmacies, and clinicians
- Increasing number of health plans, long-term and post-acute care organizations and specialty pharmacy organizations

As medical record locator:

- “Most robust”
- 258 million patients and identified
- 108 million links to clinical document sources in 2018.



- Primarily considered a PBM network
- Tied into Walgreens, CVS, etc.
- A key benefit to HIEs is the fill data, as is not generally available from other sources
- Expensive for HIEs to join
- IP address for all prescribing physicians
- <https://surescripts.com/>

8. OpenNotes

Mission: A movement

- Spread the availability of open visit notes to:
 - Empower patients, families, and caregivers
 - Provide a sense of control of their healthcare decisions
 - Improve the quality and safety of care.
- Study the impact of consumer access to notes



More than 40,000,000 patients have access to clinical OpenNotes

- "...patients, particularly those from underserved populations, feel more engaged in their care and gain greater benefit from reading the notes their clinicians write."
- Catherine DesRoches, DrPH, Executive Director of OpenNotes, and researcher in the Division of General Medicine at [Beth Israel Deaconess Medical Center \(BIDMC\)](https://www.bidmc.org/)

<https://www.opennotes.org/>

The Evidence

- New England Journal of Medicine, 1973: Giving Every Patient His [sic] Medical Record
 - Maintaining high quality of care, establishing mutually satisfactory physician/patient relations, ensuring continuity and avoiding excessive bureaucracy
 - Could be achieved, in part, if patients were given copies of their medical records."
 - "[Giving Every Patient His Medical Record: A Proposal to Improve the System](#),"
- Annals of Internal Medicine, 2012: Inviting Patients to Read Their Doctors' Notes
 - 77% to 87% reported that open notes helped them feel more in control of their care;
 - 60% to 78% of those taking medications reported increased medication adherence;
- Journal of Medical Internet Research, 2015: Sharing Notes & Medication Adherence
 - Confirmed finding on adherence for antihypertensive medications
 - Majority of physicians reported that sharing notes led to improved patient satisfaction and trust
 - Majority of patients reported same or better regarding their physician
- JAMIA, 2016: Patients, Care Partners, and Shared Access to the Patient Portal
 - Portal access highly valued by care partners

Implementation

- Via EMR portal – on **provider by provider basis**
- Institutions encouraged to implement via clinician opt-out (less than 1% do opt out)
- Differs from typical portal in that it MAY provide fuller access
 - Where not restricted by department
 - Or by opt-out
- Consumers report that access to notes is a positive factor when selecting a clinician

Relationship to Information Sharing

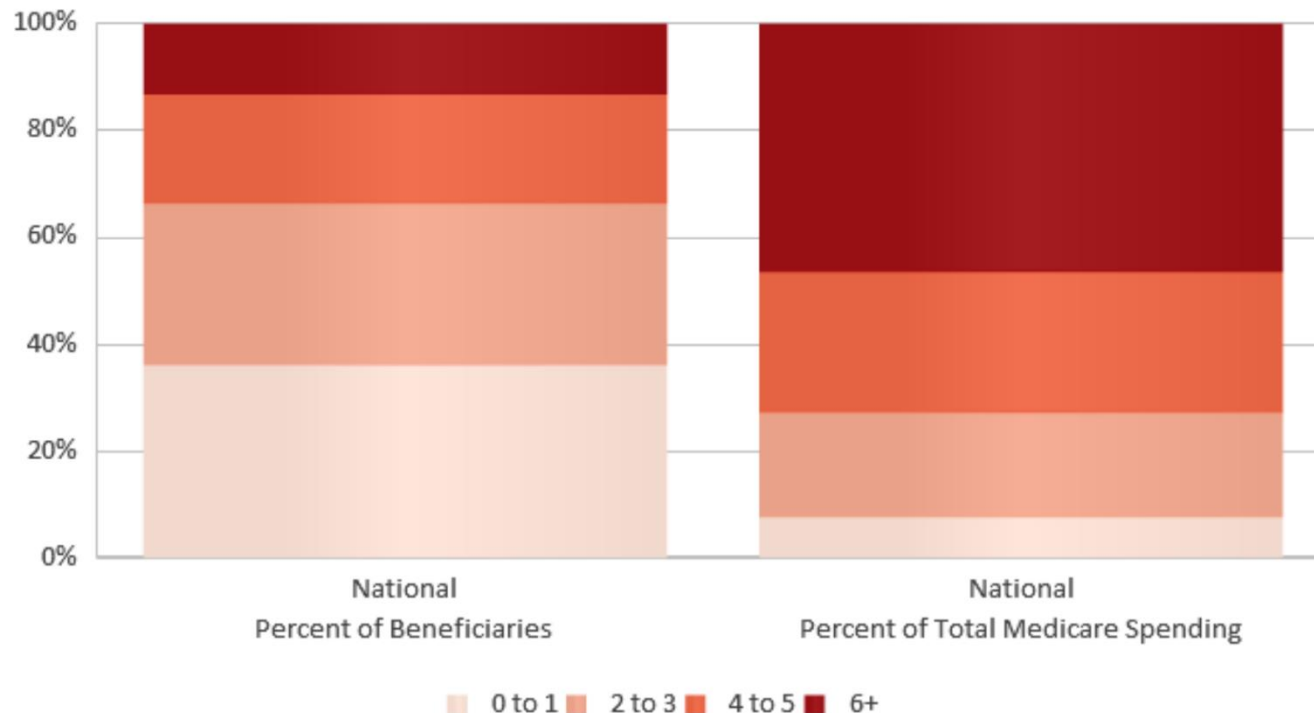
- Integrated into VA's Blue Button
- IF & WHEN ONC/CMS rules require and vendors adopt full, open APIs, provides basis for 3rd party applications to cater to consumer preferences

10. Post-Acute Care Interoperability Landscape Analysis

Post-Acute Care (PAC) includes

- Long-Term Care Hospitals (LTCH) • Skilled Nursing Facilities (SNF) • Home Health Agencies (HHA) • Inpatient Rehabilitation Facilities (IRF) • Hospices

Patients with multiple chronic conditions: 10% of population; 50% of cost



<https://www.cms.gov/Outreach-and-Education/Outreach/NPC/Downloads/2019-03-19-Data-Interoperability-Presentation.pdf>

https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Dashboard/chronic-conditions-state/cc_state_dashboard.html (requires Flash)

Participants

- 12 vendors, 3 providers, 4 provider member organizations, 1 HIE
- Some have Meaningful Use certification, relevance questioned
- All vendors and 2 of 3 of providers have an interoperability roadmap
- All vendors and all one provider connect with an HIE

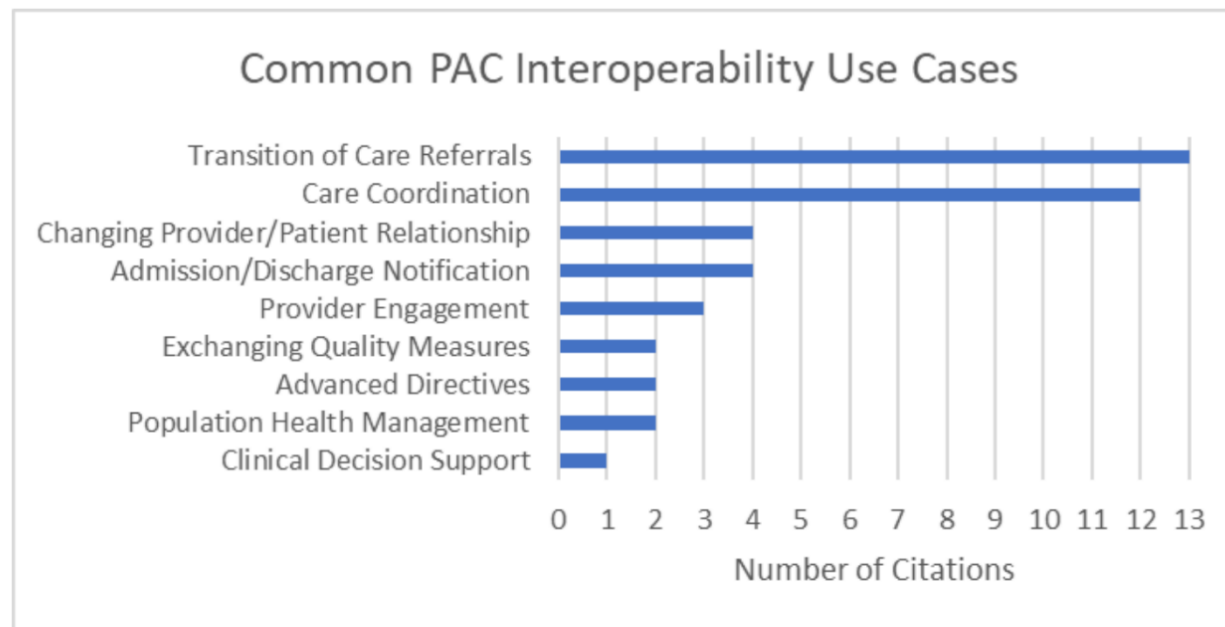


Figure ES-1: Commonly Cited PAC Interoperability Use Cases

Interoperability Challenges

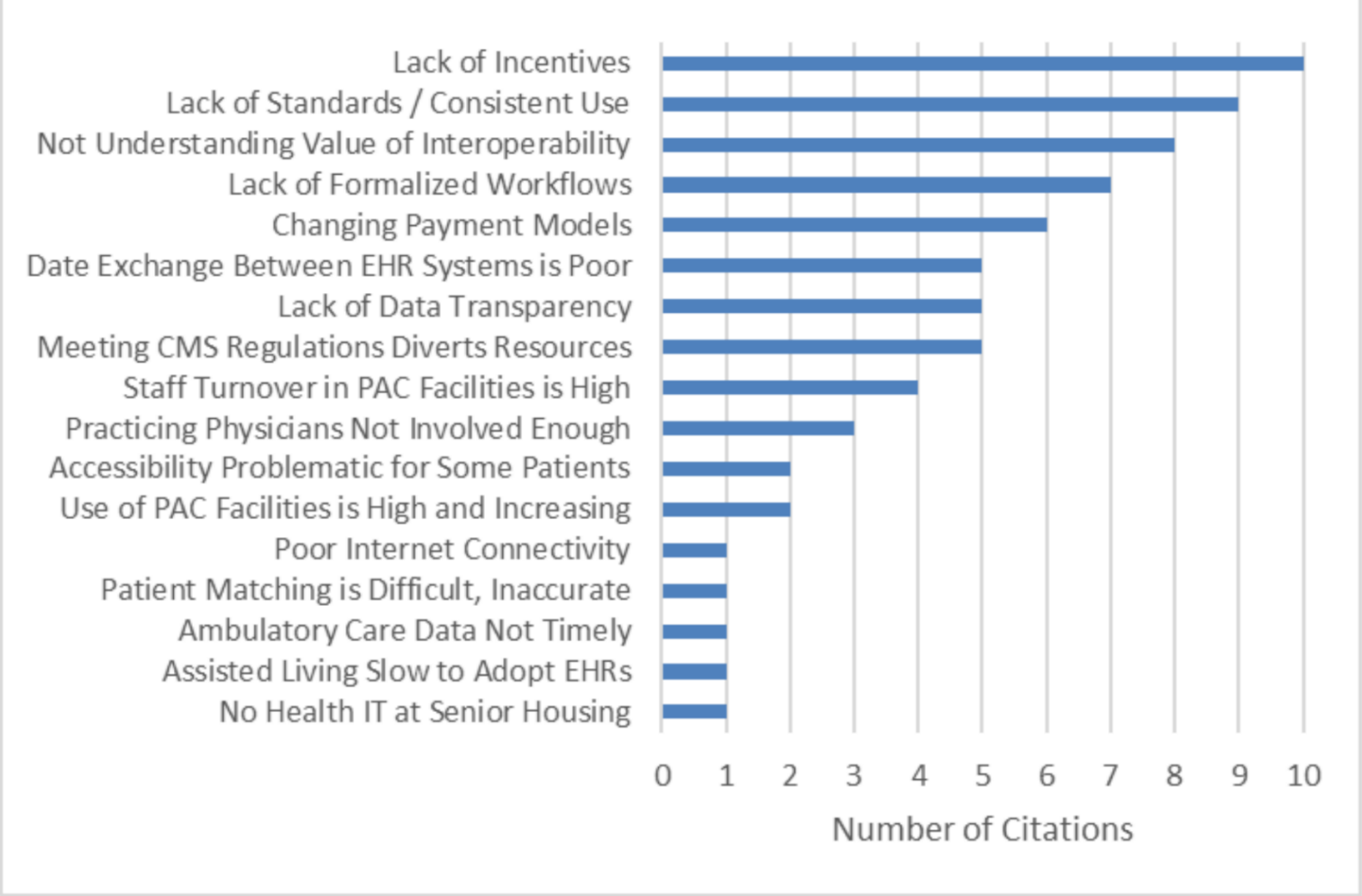
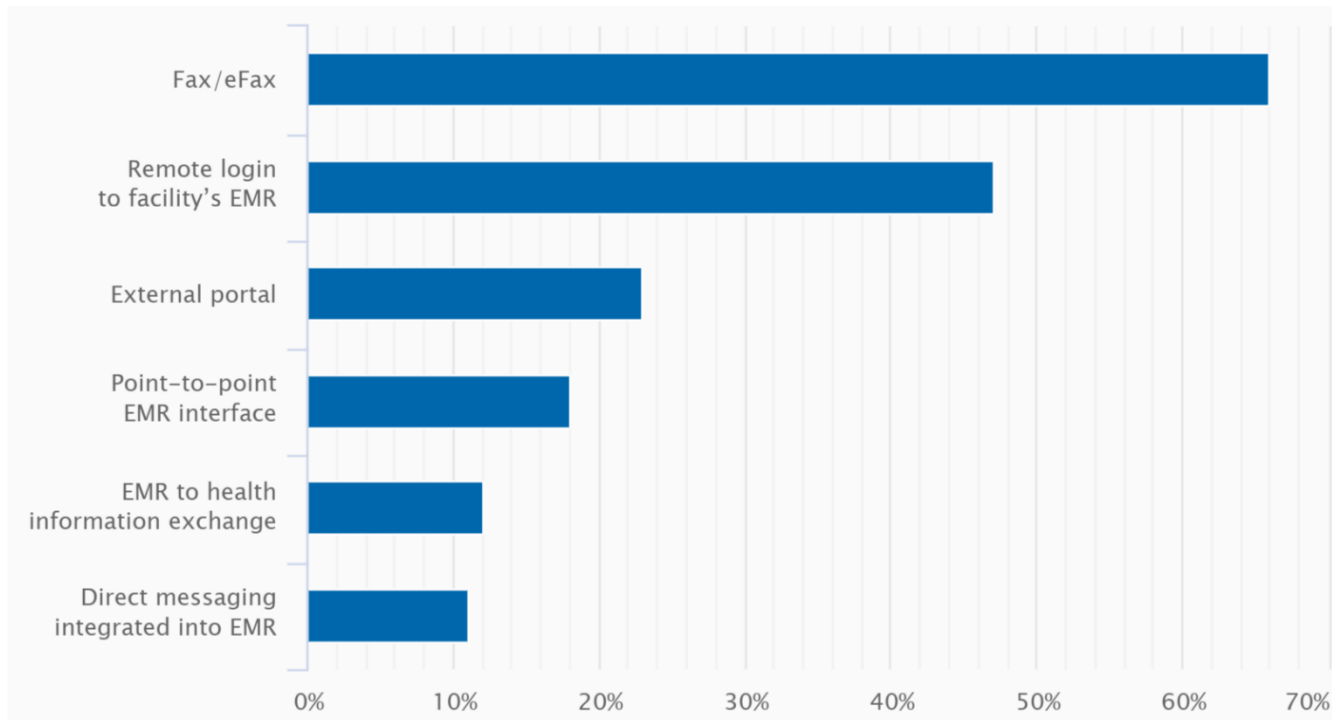


Figure ES-2: Commonly Cited Challenges to PAC Interoperability

KLAS 2018

- How PAC Access Patient Records



KLAS Research, Post-Acute Care 2018: Providers' Simple Request: "Help Me Connect," March 2018. Based on 160 interviews with home care and long-term care organizations

White Paper Recommendations (condensed)

- CMS should continue to engage with ONC, integrate PAC into broader interoperability
- Manage assessment terminology in National Library of Medicine tool
- Establish PAC Interoperability Working Group to support governance, standards
- Streamline and harmonize regulatory requirements
- Implement open APIs (FHIR) for PAC assessment submissions

Let's hear from you on LTC Interoperability Landscape:

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10. National Public Health Reporting Centers for Disease Control and Prevention (CDC)

Liora

CDC's National Healthcare Safety Network (NHSN)

- Nation's most widely used tracking of healthcare associated infections (HAIs) and related information on antimicrobial use & resistance (AU/AR or AUR)
- Continually expanding coverage
 - Conditions: late-onset sepsis and meningitis in the neonatal population, blood safety
 - Facilities: hospitals, dialysis centers, ambulatory surgical centers, and now long-term care (LTC)
- Provides data at facility, region, state, and national level
- Data collected by NHSN posted publicly on CMS's [Hospital Compare website](#)
- 25,000 facilities reporting
 - Hospitals, dialysis centers are the majority of users
 - Growth areas are LTC, psychiatric hospitals
- **8,000 facilities report directly from EHRs** using HL7 Standards
 - AU/AR, others, are only reportable via HL7 Standards
 - Standards are a variant on C-CDA; many, including all new reports, also reportable with FHIR



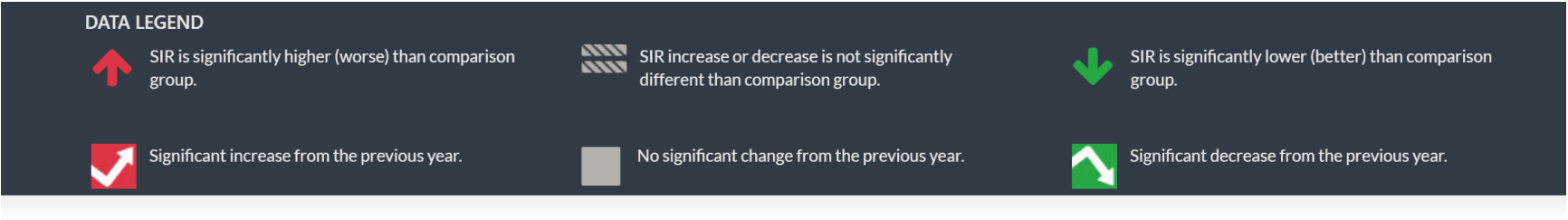
Benefits of EHR Reporting

- Reduction in provider reporting burden through elimination of redundant data entry for 18 HAI report types
- AU/AR only reportable using EHR/standard format
- Model for regulatory, commercial vendor, and stakeholder collaboration
- Similar reporting methods adopted on CDC programs for birth and fetal death records, early hearing detection, electronic case reporting
- Consistent metadata, data types, terminology for public health and continuity of care (CDA, FHIR, C-CDA)

CDC's National Healthcare Safety Network (NHSN)

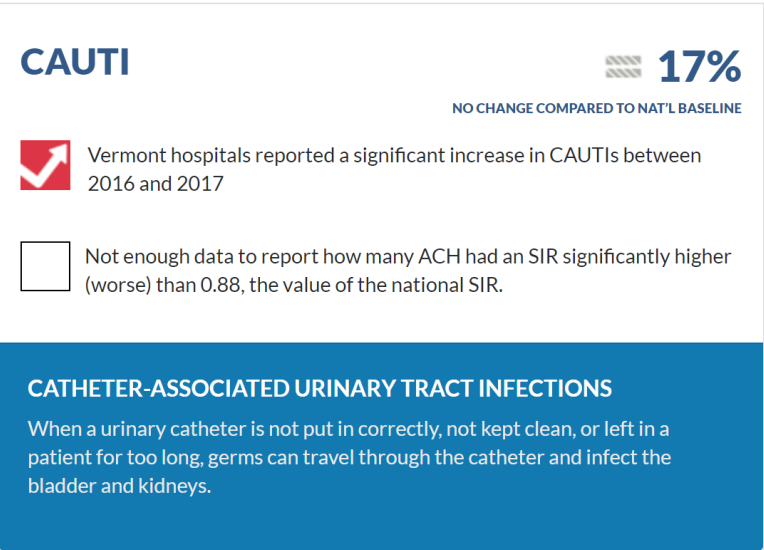
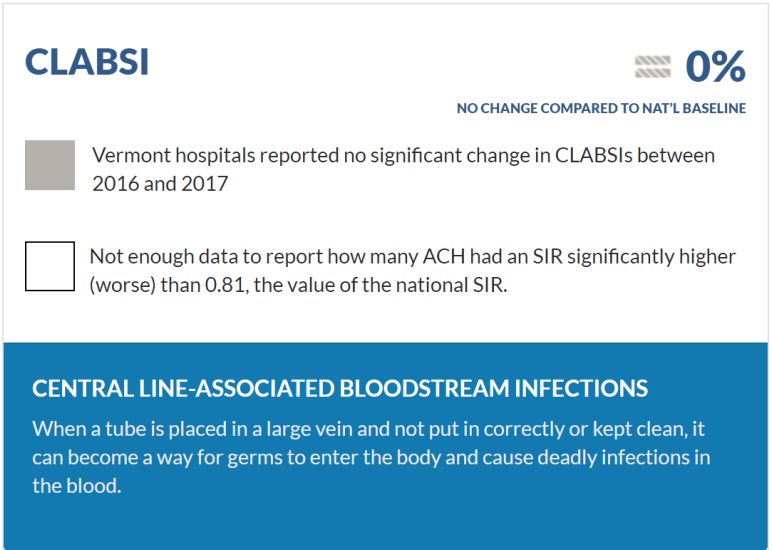
Vermont Participation

- Vermont and New York were first states to mandate reporting of HAIs to NHSN
- Benchmark against national trends



Vermont Data for Acute Care Hospitals, Year 2017

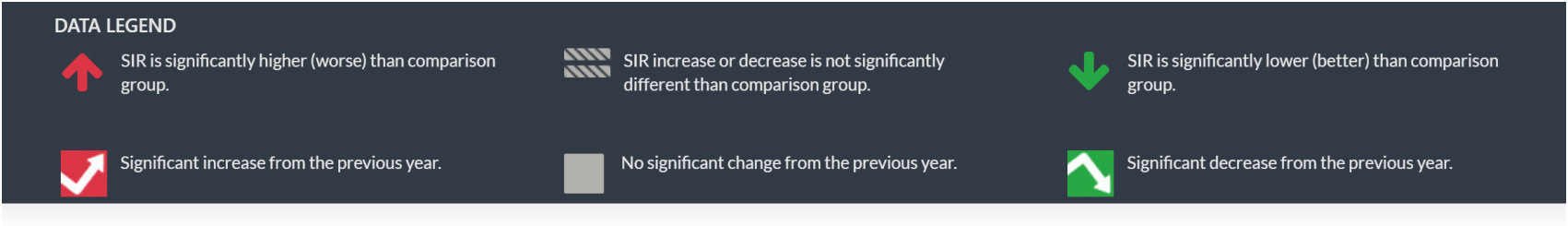
 Card View  Table



CDC's National Healthcare Safety Network (NHSN)

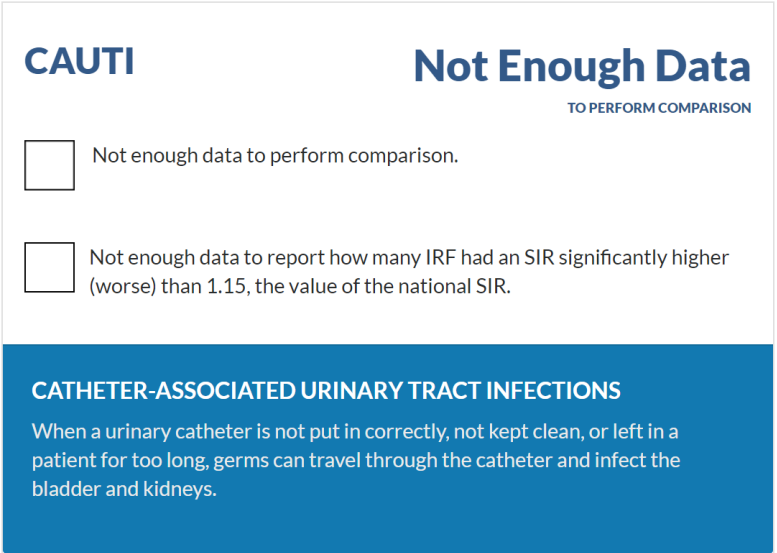
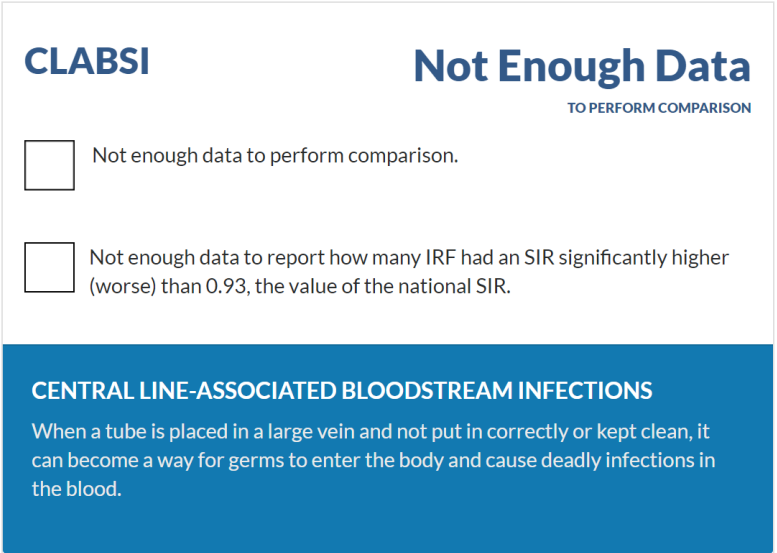
Vermont Participation

- Vermont and New York were first states to mandate reporting of HAIs to NHSN
- Appear not to be reporting from IRF



Vermont Data for Inpatient Rehabilitation Facilities, Year 2017

 Card View  Table



Opportunities: increase participation through electronic reporting

- All acute care hospitals
- Inpatient Rehab Facilities (IRF)
- Long-Term Care Facilities (LTCF)

Leverage for quality metrics, continuity of care, public reporting

<https://www.cdc.gov/nhsn/index.html>

Let's hear from you on trends in national PH Reporting:

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11. Telehealth Initiatives

Liora Alschuler

Telehealth

- Remote visits, typically via webcam, can be audio only
- May include remote monitoring devices

Acceptance and Use

- American Medical Association: 15% of physicians have used to diagnose or treat
- AmericanWell: 22% of physicians report usage (up from 5% reporting usage in 2015)
- Usage across physician age, gender, rural/urban lines

Successes

- VA remote monitoring
 - Remote monitoring costs \$1,600 per patient
 - Traditional care costs \$13,000 per patient
 - 25% reduction in inpatient days
 - 19% reduction in hospital admission
- Cardiomems telehealth project
 - \$1 spent on remote monitoring provided \$3.30 return in savings
 - Study of 20 remote monitoring trials found 20% reduction in mortality, 15% reduction in admissions related to heart failure
- Mississippi Delta trial
 - If 20% of state diabetics enrolled, Medicaid savings would be \$189M/year

High Priority Areas for Funding: Example—Connected Care Pilot Program

- Follow up on rural patients
- Providing mental health, dermatology, other services, treating 60 different conditions
- Up to \$5M from Universal Service Fund (USF) available
 - For digital inclusion, can fund telecom infrastructure where needed
 - Can be combined with other, related sources
 - Under the Federal Communications Commission
- Focus on low income (Medicaid) and veterans with chronic conditions
- Focus on vulnerable populations, priorities consistent with the Vermont State Health Improvement Plan 2019-2020

<https://www.fcc.gov/document/fcc-proposes-100-million-connected-care-pilot-telehealth-program>

Let's hear from you on trends in use of telehealth:

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That's a wrap!

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- Please let us know what other national trends/initiatives are important to you.**